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Summer Village of Waiparous
Urban Fringe Discussion Paper

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Calgary Regional Planning Commission
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SUMMER VILLAGE OF WAIPAROUS
URBAN FRINGE DISCUSSION PAPER

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SUMMER VILLAGE OF WAIPAROUS
URBAN FRINGE DISCUSSION PAPER

1.0 INTRODUCTION

1.1 PURPOSE OF THE PAPER

The purpose of this paper is to outline the principles of the Urban Fringe as set out in the Calgary Regional Plan, 1984, and to present the planning rationale for the creation of an Urban Fringe Part for the Summer Village of Waiparous.

1.2 THE CALGARY REGIONAL PLAN

The purpose of the Urban Fringe Part as established in the Calgary Regional Plan in Section 4.11.1 is as follows:

> "The purpose of the Urban Fringe Part is to protect future long-term growth options for urban municipalities and to act as a buffer between certain types of rural uses and urban development, which may be incompatible."[1]

It should be noted that, in this paper, the terms "Urban Fringe Part" and "urban fringe" are synonymous. In addition, two terms used in the above quote of Section 4.11.1 of the Regional Plan require elaboration:

(a) "Long term growth options" refers to the land required to meet the needs of the projected population anticipated to be achieved in the urban municipality within the next 40 to 60 years. This concept is intended to ensure that enough land is suitably located in the urban fringe to allow the urban municipality a choice for future long-term development.

As the time horizon for selecting the urban fringe is so far into the future, uncertainty in planning for it is considerable. Thus, choice and flexibility are key components in

determining the final outcome of the urban fringe area. These two factors may be addressed by the selection of alternate areas for future urban growth. The amount of choice and flexibility is open to negotiations between the affected municipalities.

(b) "Buffer", refers to a space separating immediately adjacent land uses which may be incompatible. Certain types of development would be allowed in the buffer area but the range of uses would be limited to those compatible with existing development.

1.3 URBAN FRINGE PART BOUNDARY

Upon ratification, the Calgary Regional Plan established an Urban Fringe Part boundary surrounding all urban municipalities. The Summer Village of Waiparous, however, was not incorporated at the time of the Plan's ratification and therefore does not have an urban fringe. Waiparous Council has expressed an interest in establishing an urban fringe in order to protect future long term growth options, and to provide a buffer between land uses which may be incompatible with the "quality of life" that the community presently enjoys. Waiparous Council feels the policies of the Calgary Regional Plan should apply equally throughout the region and, as such, believes that an Urban Fringe Part which provides protection for their needs and circumstances should be established.

1.4 AMENDMENT TO THE REGIONAL PLAN

In an effort to foster co-operation, the Calgary Regional Plan encourages mutual agreement between affected municipalities regarding any proposed amendment concerning the Urban Fringe Part. Section 4.11.8 of the Plan further provides an individual municipality has the right to apply for an amendment notwithstanding that two municipalities may not be in agreement on an

urban fringe matter. The Summer Village of Waiparous and the Improvement District of Bighorn have expressed a desire to co-operate and reach a mutual agreement on the establishment of an Urban Fringe for Waiparous. This discussion paper is intended to provide the foundation for the establishment of an Urban Fringe for Waiparous that meets the objectives of the Regional Plan.

The Calgary Regional Plan contains specific policies in Section 4.11.3 to change an existing urban fringe boundary although the Plan is silent in a case where a municipality is applying to create an urban fringe. In either instance however, the major purpose of the amendment is to design an urban fringe that is tailor-made to meet the long term growth and buffering requirements of that urban municipality. The creation of an urban fringe "boundary" for Waiparous utilizing the criteria as set out in Section 4.11.3 of the Plan is therefore considered to be a reasonable interpretation of the Plan's policies. These criteria must be satisfied and the information presented throughout this paper has been prepared in recognition of these noted amendment criteria.

1.5 DESCRIPTION OF STUDY AREA

The Summer Village of Waiparous is located approximately 19 miles (30 kilometres) west of Cochrane and is accessible via Highway 1A and the Forestry Trunk Road (see Figure 1). The Village of Waiparous is surrounded by the "Ranchlands" area of the Improvement District of Bighorn and is situated at the confluence of Waiparous Creek and Ghost River.

The topography of the area is typical of the Alberta foothills, with northwest trending valleys and ridges ranging in elevations between 4,000 and 5,500 feet. Many of the ridges are heavily timbered but part of the area was burnt over several years ago.

The valleys are to some extent open, but considerable parts have a thick growth of dwarf birch which limits the grazing land.[1]

The study area that has been examined for purposes of this discussion paper includes those lands which are roughly .75 to 1.5 miles (1.2 to 2.4 kilometres) beyond the corporate limits of Waiparous (see Figure 2). The Ghost River and the Forestry Trunk Road traverse the study area and Waiparous Creek flows in a southeasterly direction to the point where it enters the Ghost River.

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1 G.S. Hume, "The West Half of Wildcat Hills Map-Area, Alberta", 1936 Memoir of the Geological Survey of Canada.

2.0 DEVELOPMENT POLICIES

This section briefly summarizes the development policies of the Summer Village of Waiparous and the Improvement District of Bighorn which would most directly have an impact on Waiparous and its surrounds. As well, some of the lands surrounding the Village are Crown land and therefore subject to the provisions of the Ghost River Sub-Regional Integrated Resource Plan. A brief discussion of these policies and their potential implications for land surrounding Waiparous will also be presented.

2.1 SUMMER VILLAGE OF WAIPAROUS

Since the Summer Village of Waiparous was only incorporated in January of 1986, the development policies for the community have not been clearly established in the form of a long range plan. The preparation of a Land Use By-law is in its final stages, however, and these policies will guide development in the years to come. In addition, since incorporation Council has dealt with a number of development and subdivision applications which have helped to shape the overall development policies of the community.

Council has generally directed that future development activity subscribe in form and density to the existing characteristics of the community. That is, residential development will remain as the primary land use with a number of public utility and recreational land uses being allowed on the publicly-owned lands in the Village. Further to this, Council has indicated a desire to develop a comprehensive open space system for Waiparous that links major activity nodes and environmental features of the community. These would be established through the subdivision and development processes and eventually provide for non-vehicular access to and along the shores of Waiparous Creek and Ghost River.

With respect to the regulations on land use activities within the Village, the proposed Land Use By-law continues a previously established regulation of the Improvement District of Bighorn which prohibits the keeping of livestock. The design and construction of new residential developments will also be closely scrutinized in light of the unique characteristics and natural setting of Waiparous. The major thrust of these development policies that will guide and direct the future growth of Waiparous is a desire to preserve and enhance the quality of the living environment.

2.2 IMPROVEMENT DISTRICT OF BIGHORN

The development policies of the Improvement District of Bighorn that apply to the land surrounding Waiparous are contained in the Ranchlands General Municipal Plan and the Improvement District of Bighorn's Land Use By-law. A major review of Bighorn's land use policies for this area was recently completed and the General Municipal Plan is now awaiting final approval of the Minister of Municipal Affairs.

The policies of the Ranchlands General Municipal Plan will govern the sorts of development activities that might occur on lands surrounding Waiparous. The primary land use that will be allowed in Ranchlands is ranching and agricultural pursuits with provision being made for some limited country residential, industrial and recreational developments over the time frame of the Plan. Although there are no explicit policies dealing with the compatibility of certain land use activities on the one urban municipality within the Ranchlands, the Plan does stress the importance of assessing the compatibility of development on "existing and adjacent land uses".

The document that implements the Ranchlands General Municipal Plan policies is the Improvement District's Land Use Order. At the present time all land within the study area is designated under one of three districts; Hamlet Residential District for

Benchlands, Conservation Area Forestry District for all Crown land and Agricultural Conservation District for all of the patented land. The Conservation Area Forestry District is intended to provide for the conservation of extensive areas of land with forestry and extensive agricultural uses considered in keeping with the intent of the District. The Agricultural Conservation District is structured so as to provide for the continuing use of land for extensive and intensive agricultural activities, to accommodate institutional uses associated with agricultural areas and to provide for conservation practices in the use of open spaces. The list of permitted and discretionary land uses compliments the purpose and intent statements for each of the respective Districts.

2.3 THE GHOST RIVER INTEGRATED RESOURCE PLAN

As mentioned earlier, much of the land surrounding and to the north of Waiparous is Crown land. The Ghost River Draft Integrated Resource Plan has been prepared by Alberta Forestry, Land and Wildlife and refines the Eastern Slopes Policy. The Plan divides the planning area into smaller units called resource management areas and specifies resource management intents and objectives for each of these areas. The Summer Village of Waiparous is located within the Water Valley sub area, whose management intent is to allow for the utilization of the full range of available resources within a multiple use context with an emphasis on domestic grazing and timber production in association with private land uses.

The Plan is a statement of the Alberta Government's intentions for managing public land and resources and allows for some development of tourist facilities and services in and around the management area. During the public consultation process on this Plan, presentations were received from a large and diverse group of Albertans who utilize the area and wished to ensure their interests and leisure pursuits were protected. In particular, the Plan anticipates increased traffic volumes on the Forestry

Trunk Road to access the area and the Summer Village of Waiparous was one group that expressed concern over both the short and long-term implications for Waiparous, in terms of the inability of the Forestry Trunk Road to handle these traffic volumes.

The Ghost River Plan has not been approved by Cabinet as yet, but all indications point to more intensive land uses within the management area surrounding Waiparous. Furthermore, the Plan proposes to change the Green Area/White Area boundary such that the majority of land surrounding Waiparous would no longer be in the Green Area (see Figure 5). The primary difference between the two areas relates to differences in land use and settlement patterns. The perception from local ranchers is that the White Area has a higher priority for agriculture than the Green Area. One possible implication of this change in the boundary is that some of the Crown land in the proposed White Area may become patented by the Provincial Government although the overriding criteria of timber, watershed and recreational potential will govern any changes in land tenure patterns for the area.

2.4 CONCLUSIONS

This series of development policies, which are at various stages in the approval process, anticipate increased levels of development activity for Waiparous and its surrounds. Provision has been made for a broadening of the land uses that may occur on public and private lands. Applications for commercial ventures in the general vicinity of Waiparous have been made to the different approving authorities with jurisdiction in the area over the last year and there is a general perception that the area is on the verge of change. Waiparous Council is concerned about the activity occurring in the vicinity of Waiparous relative to the impacts on the Village.

3.0 LAND USE ANALYSIS AND PROJECTIONS FOR WAIPAROUS

3.1 HISTORIC DEVELOPMENT PATTERNS

Waiparous is in a unique situation in that it is a newly incorporated municipality with very little information available on historical population activity. This makes a discussion and analysis of its population growth, land use distributions, physical growth characteristics and so forth more difficult. The two official census figures that we have for Waiparous show 18 permanent residents in 1983 and 16 in 1986. The Summer Village of Waiparous, however, is a seasonal community and the more representative "descriptives" of the present and potential long-range characteristics of the Village are the different components of its land area.

Because there are different characteristics associated with a seasonal residential community such as Waiparous it is difficult to predict long-term growth requirements on the basis of traditional population projections or number of dwelling units constructed. For these reasons, there are no projections given, only a historic picture of what has occurred.

Any discussion of Waiparous as it relates to the long-term growth requirements, however, should not be interpreted as a statement of the community's "ambition" to grow. Waiparous will only grow beyond its present corporate limits if the community aspires to these growth options. It is, however, quite conceivable that over the next 40 to 60 years the growth trends that have occurred over the last 40 to 60 years could be repeated. The purpose of the urban fringe is to provide a means for a community to protect its options for growth and in this case, that may be the status quo or perhaps a fully integrated community with diversified land uses. This discusson paper is tailored around the premise that Waiparous may duplicate the historical development patterns of the last half century and discusses what sorts of land areas would be necessary to accommodate that expansion. This approach

is consistent with the methodology employed by other municipalities in the Region during the urban fringe refinement process. In the final analysis, the decisions of where and when to grow will result from market pressures and rest on the shoulders of the decision- makers of the day.

Subdivision of the townsite of Waiparous occurred in two phases. The land to the east of Waiparous Creek was subdivided into 41 lots from an initial land area of 51.8 acres by Plan 3046 EX in 1944. The subdivision of 48 lots on the west side of Waiparous Creek was established by Plan 1368 JK, comprised a total area of 48.81 acres and was registered in 1962.

The historic development patterns of Waiparous could best be characterized as sporadic. Between 1929 and 1986 there have been 68 dwellings constructed which, over the 57-year period, averages a little more than one dwelling unit per year. The physical development of Waiparous, as illustrated on Graph A, however, depicts the bulk of that construction activity occurring between 1962 and 1986. During this 24-year period, development activity has averaged a little more than two new dwelling units per annum.

The reasons for this concentration of development in the last 24 years may be attributed to a combination of factors including a pent-up market demand that was artifically suppressed and the actions of the Alberta Government. The rate and amount of land which has been patented by the Department of Lands and Forests along with the time and area building commitments that have been imposed (particularly with the registration of Plan 1368 JK in 1962), have dictated the pace of building activity in the Village. The Alberta Government therefore has historically controlled the amount and type of building activity. In response to individual applications to lease and/or buy these parcels, along with a perceived mandate to accommodate some of the public demand for recreational lots, a conscious process of public land being patented and subsequently developed has been permitted. It follows then that the prospects for outward expansion of Waiparous

onto Crown lands will depend on the actions and policies of the Provincial Government. Unfortunately, the Ghost River Plan is silent on this issue.

In any event, the construction of 21 dwelling units in 1963 was a direct result of the Department of Lands and Forests subdivision of 1962 (Plan 1368 JK) which required the construction of a minimum 400 square foot dwelling within a one year time frame. Previous to that there were eight dwellings located within the present-day corporate limits of Waiparous and since 1963, a further 34 residences have been constructed.[2]

On the basis of the past development occurring, the Village could double in size. A range of a net developable land area of 50 acres using minimum lot standards in the Regulations, to 100 acres, with larger lot sizes is possible.

3.2 EXISTING LAND USE CHARACTERISTICS

In order to project the long range land requirements for Waiparous, an understanding of the existing development characteristics and their interrelation is necessary. The following provides a summary of the existing development and land use characteristics for Waiparous.

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[2] Note: The years in which five of the 68 dwelling units in Waiparous were constructed is not known and hence, only 63 of the dwellings are accounted for.

TABLE 1

Existing Land Use Characteristics[3]

Historic Population Activity

1983 - 18 permanent residents (Source: CRPC Census Results)
1986 - 16 permanent residents (Source: Statistics Canada)

Summary of Parcel/Lot Development

Total Number of Parcels	- 85
Total Number of Lots	- 93
Private Ownership Parcels Developed	- 68
Private Ownership Parcels Undeveloped	- 10

Major Subdivisions

1944 - 41 lots (Plan 3046 EX)
1962 - 48 lots (Plan 1368 JK)

Land Tenure Pattern*

Private Ownership	- 78 parcels
Crown (in right of Canada or Alberta)	- 7 parcels

Parcel and Lot Area Characteristics*

Average Parcel Size	- .463 ha (49,838.5 square feet)
Average Lot Size	- .428 ha (46,067.9 square feet)
Average Residential Lot Size*	- .247 ha (26,614.5 square feet)

*(excludes Community Reserve Parcels and the 20-acre parcel in the northwest sector of Waiparous).

Building Information

Average Floor Area for all Assessed Buildings	- 67.5 m^2 (726.6 square feet)
Average Floor Area for all Assessed Dwellings	- 75.6 m^2 (813.7 square feet)
Average Condition for all Assessed Buildings	- 73% (of life remaining)
Average Condition for all Assessed Dwellings	- 71% (of life remaining)

[3] Unless otherwise noted, all information was obtained from the CRPC Regional Information System. The term "parcel" refers to all of the land area that is described in a single Certificate of Title, while "lot" refers to each individual lot created at the time of subdivision, whether or not it is described on a separate Certificate of Title.

The table indicates a total of 78 parcels under private ownership and 68 parcels presently containing a dwelling unit. The average size of a lot intended for residential use is slightly over 26,000 square feet in area with the larger lots located on the east side of the Village (33,116 square feet) and the smaller ones located in the newer of the two subdivisions to the west of Waiparous Creek (averaging 20,397 square feet in area). The assessment information that is presented indicated an average floor area for dwellings of more than 800 square feet and a condition rating for these dwellings that reflects a housing stock in very good condition.[4]

With respect to the infill potential of the Village, which refers to the total potential development that could occur, this figure reflects the total number of vacant lots that are considered developable and under private ownership, in addition to any new lots that may be created on parcels previously unsubdivided. The following table and accompanying figure identify those parcels which have been identified as having some potential for additional development along with the development patterns that Council considers realistic.

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[4] The assessment information presented was obtained from Alberta Municipal Affairs, Assessment Division (effective January, 1986) and does not form part of the Regional Information System data.

TABLE 2

Infill Potential and Vacant Parcels

Parcel ID	Existing Development	Infill Potential (estimated)*	Total New Parcels	Total New Dwellings
9800	1 dwelling	2 additional lots plus balance	2	2
9801	vacant	2 lots	1	2
9802	vacant	1 dwelling unit	0	1
9809	vacant	1 dwelling unit	0	1
9811	vacant	1 dwelling unit	0	1
9814	vacant	1 dwelling unit	0	1
9820	vacant	1 dwelling unit	0	1
9891	vacant	1 dwelling unit	0	1
9824	1 dwelling	1 additional lot plus balance	1	1
9826	vacant	1 dwelling unit	0	1
9827	1 dwelling	3 additional lots plus balance	3	3
9831	1 dwelling	1 additional lot plus balance	1	1
9833	vacant	1 dwelling unit	0	1
9837	vacant	1 dwelling unit	0	1
9874	1 dwelling	2 additional lots plus balance	2	2
		Totals	10	20

* As estimated by Council.

Figure 3 illustrates where this infill potential is located and, not surprisingly, the majority of it is located in the older subdivision (Plan 3046 EX) in east Waiparous. There was never a building commitment attached to the sale of these lots and consequently a number of them still remain vacant. At the present time there are two vacant parcels for sale (Parcel ID's 9820 and 9891) as well as a developed parcel which has been on the market for some time (Parcel ID 9836). Otherwise there are no lots on the market at this time. Discussions with a number of these landowners indicate that the status of these lots will not change over the short-term at least, as many of the lots are intended to be passed down to the heirs and successors of the existing landowners. Discussions with real estate agents who cover this territory indicate a strong demand for this sector of the real estate market with very little supply to meet these needs. In summary, the number of vacant parcels in the community do not reflect a lack of demand, as may be the case in other urban areas.

3.3 CONCLUSIONS

Waiparous has experienced the bulk of its growth in the last 24 years and much of this can be explained by the development conditions that were imposed during the period when lots became available. Over time, the community has matured and developed in such a way as to take on many of the characteristics typically found in a more established community. As the Village has developed there have been substantial increases in the size and value of the housing stock. Council believes that the overall residency characteristics of Waiparous will be transformed over the next decade or so as more landowners retire and become permanent residents of the Village (in fact, this process has already begun as evidenced by the number of full-time "households" in Waiparous which is reported to be 14 households.[5] Indeed, the Alberta Department of Municipal Affairs, Assessment Division estimates

there are 20 dwelling units in the Village at present that are habitable on a year-round basis.[6]

This review of some of the more detailed development characteristics of Waiparous serves to provide a clearer insight into how the community is developing over time. Dwellings were constructed initially to meet the minimum requirements for acquiring a lot in Waiparous. The size and quality of the housing stock has steadily improved over the last 25 years and Council believes this trend will continue into the future. Whether or not this development activity will spill-over beyond the Village's present corporate limits will depend on a multitude of factors, not the least of which is a desire on the part of Waiparous ratepayers to see their community grow. The point of this section of the discussion paper is that growth is a very real option for Waiparous and one which the Regional Plan considers a valid justification for the establishment of a Waiparous Urban Fringe.

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5 Source: Interviews conducted by Mayor Shirley Begg, November, 1987.

6 Habitable was defined as meaning a dwelling containing indoor cooking, heating, sanitary and sleeping facilities which Municipal Affairs then determined on a calculation of assessed improvement value before depreciation of $18,000 of more.

4.0 INVENTORY AND ANALYSIS OF LAND SURROUNDING WAIPAROUS

4.1 EXISTING LAND USE CHARACTERISTICS

The study area contains a wide variety of landforms from steep rock-faced valley walls and foothills to gently rolling meadow lands (see Figure 4). Variance in elevations range from a low of roughly 4,000 feet in the valley floor of the Ghost River to almost 5,000 feet in the southern reaches of Salter Ridge which is located north of Waiparous. The land is predominantly treed with some bare faced sloping land and some pockets of cultivated/ pasture land.

The Hamlet of Benchlands is situated one mile to the east of the Summer Village of Waiparous and is bounded to the north by the Forestry Trunk Road and to the south by the Ghost River. The farmstead for Erik Butters ranching operation is located south of the elbow in the Forestry Trunk Road, adjacent to Robinson Creek (see Figure 5 for land ownership). Immediately south of the Forestry Trunk Road and about one-quarter mile east of Waiparous is a gravel pit which has a driveway leading south into the treed area which provides access to the Stehr's residence (D.A. Robertson Investments Ltd.) and the Fullerton property. Moving westward, a Boy Scout camp is located on the Robinson Crown lease which is the quarter immediately east of Waiparous. The Wasson farmstead is situated south of the Forestry Trunk Road on the quarter section immediately west of Waiparous and some farm buildings have also been constructed on the March property which is located in the NW 1/4 1-27-7-W/5.

South of the Ghost River, the land is predominantly treed with some rock outcroppings scattered throughout but very little evidence of human disturbance to the area. Evidence of seismic exploration can be found throughout the study area with cut lines running in a north-east to south-westerly direction. To the north of Waiparous are the southern reaches of Salter Ridge which contain steeply rising valley walls of Waiparous Creek and are mainly treed with occasional rock outcroppings.

4.2 LAND OWNERSHIP PATTERNS

Figure 5 illustrates the land ownership patterns for the study area with the clear areas being patented and the shaded areas representing Crown land. All of the Crown land around Waiparous has been leased to private individuals with the exception of the land lying to the south (and west) of Waiparous Creek in Section 12-27-7-W/5 which is not under lease at this time.

4.3 AGRICULTURAL CAPABILITY

The existing land use patterns as depicted on Figure 4 show a couple of small pockets of cultivated/grazing land on the west side of Waiparous and a narrow band of cultivated land east of Waiparous which widens as you move towards the elbow in the Forestry Trunk Road (Section 8-27-7-W/5). The Canada Land Inventory Soil Capability for Agriculture is shown on Figure 6. The land is noted as having lower capability for agriculture pursuant to the provision of the Calgary Regional Plan. The better land for agriculture in the study area is located north-east of Waiparous in the area where the Butters have their ranching operation. Generally speaking, the soils in this area may be characterized as having very severe limitations that restrict their capability to producing perrenial forage crops, with the better of these lands being subject to adverse climatic conditions that limit the growing season.

4.4 ENVIRONMENTALLY SIGNIFICANT AREAS

In accordance with the provisions of the Calgary Regional Plan, an identification and analysis of any environmentally significant areas within the study area was undertaken. The information was collected from a report entitled "Environmentally Significant Areas of the Calgary Region" which provides a generalized location of the significant environmental features of the area that are considered to be regionally significant.

A number of biophysically significant areas have been identified within the study area. The Ghost River upstream of its confluence with Waiparous Creek is a classic braided mountain stream. Associated with the Ghost-Waiparous River system are extensive wetland/grassland areas in the vicinity of Salter Ridge which is due north of Waiparous. The mosaic of forest and shrub land associated with this drainage system provides important moose habitat as well as key habitat for both mule deer and white tailed deer. The Ghost River drainage system which forms a sub-basin of the Bow River drainage system has Cutthroat Trout in addition to Mountain Whitefish, Dolly Varden and Eastern Brook Trout. The spawning areas within the Ghost River drainage system are not well-known although Cutthroat Trout are believed to migrate from the Ghost Reservoir upstream into the system to spawn. The complex landscapes associated with the Ghost River and Waiparous Creek were judged to be the most important environmental features of the central portion of the Improvement District of Bighorn.

Biophysically significant areas include those areas which, by virtue of their geological or hydrological character, flora or fauna, deserve special consideration in the environmental planning process. The significant natural landscapes, key wildlife areas and key fish habitats that have been identified in this area will be subject to certain conservation measures as the area becomes more developed. During the process of examining potential areas for the expansion of Waiparous, consideration must be given to the protection of locally or regionally significant areas of environmental sensitivity.

4.5 DEVELOPABLE AREAS ADJACENT TO WAIPAROUS

The direction(s) of urban growth depends on the development potential of the land surrounding the community. In the case of Waiparous the lands considered to have potential for development and to accommodate urban expansion, given the existing transportation system for the area, are in an easterly direction between

the Forestry Trunk Road and Ghost River and westward between Waiparous Creek and the Ghost River. Figure 7 illustrates the approximate developable land area for a one mile distance on both sides of Waiparous. The calculations were based on a 40-metre lot setback from Waiparous Creek, Ghost River and Robinson Creek, and 10 metres from the Forestry Trunk Road.

4.6 CONCLUSIONS

This section of the discussion paper has provided a graphic analysis of the features and characteristics, both man-made and natural, of the study area surrounding Waiparous. When the representatives from Waiparous and Bighorn begin negotiations to establish an urban fringe for Waiparous, the characteristics of the land that include as well as preclude the expansion of Waiparous must be considered. In addition, certain features of the land may suggest the need for buffering in certain areas or negate any fringe requirement for other areas. The foregoing information is intended to assist the decision-makers in determining the long term urban fringe requirements for the Summer Village of Waiparous.

5.0 ESTABLISHING AN URBAN FRINGE PART FOR WAIPAROUS

5.1 CRITERIA FOR NEGOTIATIONS

This discussion paper does not attempt to delineate an urban fringe for Waiparous. Instead, the information that is required to establish a basis for projecting the potential long term growth characteristics for Waiparous was presented. The enabling policy provisions for the enactment of the Waiparous urban fringe, namely the Calgary Regional Plan, requires that the urban fringe contain a sufficient inventory of land to provide options for the long term growth of Waiparous, and to provide for buffering of land uses that may be incompatible. The elected officials of the two municipalities must now undertake to establish an Urban Fringe Part for the Summer Village of Waiparous that satisfies the requirements of the Calgary Regional Plan. In making this determination, the following considerations should be addressed:

- the need to ensure a sufficient inventory of land is available to allow for Waiparous' long-term growth requirements in an orderly and economic manner;

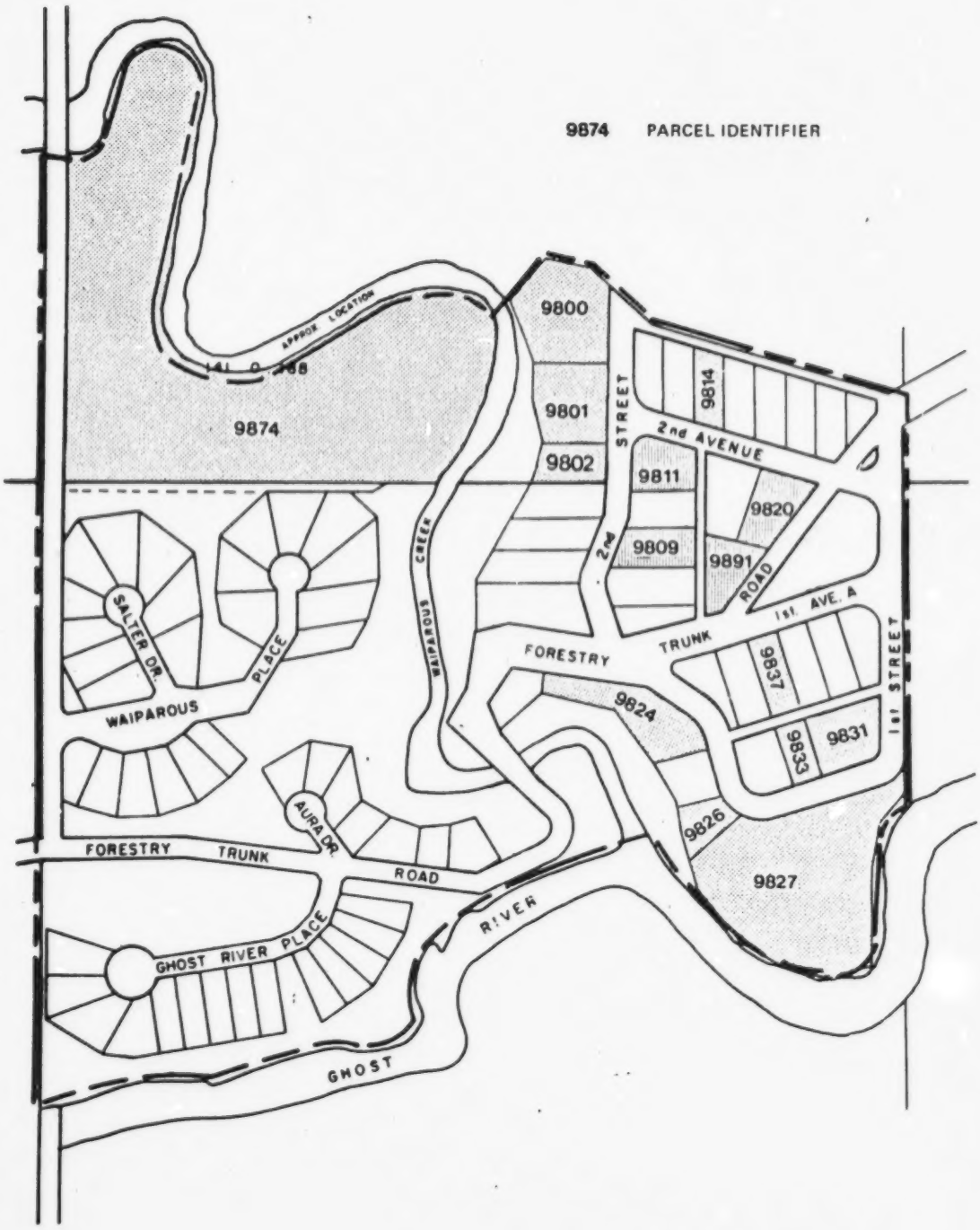
- the importance of identifying and planning for growth corridors and thereby minimizing the potential for unnecessary controls and restrictions on lands that would otherwise be free to develop in accordance with the wishes of the rural municipality;

- the importance of minimizing potential conflicts between various land uses by providing for a distinct separation between conflicting or non-compatible land use activities; and

- the need to ensure that any development activity that might occur on those lands identified for the expansion of Waiparous does not preclude that expansion and thereby eliminate one of a very limited number of options for the expansion of the Summer Village of Waiparous.

INFILL POTENTIAL

(for Private Ownership Parcels only)



WAIPAROUS URBAN FRINGE DISCUSSION PAPER

Figure 3